

OM of: US-08-711-417C-165 to: Issued\_Patents\_AA.\* out\_format : pfs

Date: Aug 28, 2002 10:02 AM

About: Results were produced by the GenCore software, version 4.5,  
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Command line parameters:

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Search information block:

Query: US-08-711-417C-165

Query length: 1551

Database: Issued\_Patents\_AA

Database sequences: 231628

Search time (sec): 24425594

Search time (sec): 34.160000

score\_list:

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seq\_name: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pcp:US-08-711-417C-202

seq\_documentation\_block:

: Sequence 202, Application US/08711417C

: Patent No. 6228611

: GENERAL INFORMATION:

: APPLICANT: Georgopoulos, Katia A.

: TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE

: NUMBER OF SEQUENCES: 202

: CORRESPONDENCE ADDRESS:

: ADDRESSEE: Fish & Richardson P.C.

: STREET: 225 Franklin Street

: CITY: Boston

: STATE: MA

: COUNTRY: USA

: ZIP: 02110-2804

: COMPUTER READABLE FORM:

: MEDIUM TYPE: Diskette

: COMPUTER: IBM Compatible

: OPERATING SYSTEM: Windows 95

: SOFTWARE: FastSeq for Windows Version 2.0b

: CURRENT APPLICATION DATA:

: APPLICATION NUMBER: US/08/711,417C

: FILING DATE: 05-Sep-1996

: PRIORITY INFORMATION DATA:

: APPLICATION NUMBER: 08/238,212

: FILING DATE: 02-MAY-1994

: APPLICATION NUMBER: 08/121,438

: FILING DATE: 14-SEP-1993

: APPLICATION NUMBER: 07/946,233

: FILING DATE: 14-SEP-1992

: ATTORNEY/AGENT INFORMATION:

: NAME: Myers, Louis P.

: REGISTRATION NUMBER: 35,965

: REFERENCE/DOCKET NUMBER: 10287/007001

: TELECOMMUNICATION INFORMATION:

: TELEPHONE: 617/542-5070

: TELEFAX: 617/542-8906

: TELEX: 200154

: INFORMATION FOR SEQ ID NO: 202:

: SEQUENCE CHARACTERISTICS:

: LENGTH: 516 amino acids

: TYPE: amino acid

: TOPOLOGY: linear

: MOLECULE TYPE: protein

: FRAGMENT TYPE: internal

: SEQUENCE DESCRIPTION: SEQ ID NO: 202:

US-08-711-417C-202

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Percent Similarity: 100.000 Percent Identity: 100.000

alignment\_block:

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Wed Aug 28 10:05:45 2002

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; Sequence 196, Application US/08711417C
; Patent No. 6228611
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
; NUMBER OF SEQUENCES: 202
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows 95
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/711.417C
; FILING DATE: 05-Sep-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/238,212
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 08/121,438
; FILING DATE: 14-SEP-1993
;
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; APPLICATION NUMBER: 07/946,233
; FILING DATE: 14-SEP-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Myers, Louis P.
; REGISTRATION NUMBER: 35,965
; REFERENCE/DOCKET NUMBER: 10287/007001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 196:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 461 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal
; SEQUENCE DESCRIPTION: SEQ ID NO: 196:
US-08-711-417c-196
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; Patent No. 6228611  
; GENERAL INFORMATION:  
; APPLICANT: Georgopoulos, Katia A.  
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE  
; NUMBER OF SEQUENCES: 202  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 225 Franklin Street  
; CITY: Boston  
; STATE: MA  
; COUNTRY: USA  
; ZIP: 02110-2804  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: Windows 95  
; SOFTWARE: FastSeq for Windows Version 2.0b  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/711,417C  
; FILING DATE: 05-Sep-1996  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 08/238,212  
; FILING DATE: 02-MAY-1994  
; APPLICATION NUMBER: 08/121,438  
; FILING DATE: 14-SEP-1993  
; APPLICATION NUMBER: 07/946,233  
; FILING DATE: 14-SEP-1992  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Myers, Louis P.  
; REGISTRATION NUMBER: 35,965  
; REFERENCE/DOCKET NUMBER: 10287/007001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 617/542-5070  
; TELEFAX: 617/542-8906  
; TELEX: 200154  
; INFORMATION FOR SEQ ID NO: 198:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 518 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; FRAGMENT TYPE: Internal  
; SEQUENCE DESCRIPTION: SEQ ID NO: 198:  
US-08-711-417C-198

alignment\_scores:  
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Ratio: 4.913 Gaps: 6  
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67 nGlyArgAlaCysGluMetAsnGlyGluGluCysAlaGluAspLeuArgm 84  
251 TGGTTGATGCTCGGAGAGAAATGAATGGCTCCACAGGGACCAAGGC 300  
84 etLeuAspAlaSerGlyGluLysMetAsnGlySerHisArgAspGlnGly 100  
301 AGCTCGGCTTTGTCGGGAGTTGGAGCATTCGACTTCCTAACGGAAACT 350  
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117 uLysCysAspIleCysGlyLeValCysGlyProAsnValLeuMetV 134  
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134 aHisLysArgSerHisThrGlyGluArgProPheGlnCysAsnGlnSer 150  
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217 uGluHisLysGluArgCysHisAsnTyrLeuGluSerMetGlyLeuPro 234  
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751 GAAGACCTGTGCAAGATAGGATCAGAGAGATCTCTCGTGTGAGCAGACT 800  
250 GluAspLeuCysLysIleGlyAlaGluArgSerLeuValLeuAspArgLe 266  
801 AGCAAGTAATGTGCCAAACGTAAAGAGCTCTATGCTCAGAAATTTCTTG 850  
266 uAlaSerAsnValAlaLysArgLysSerSerMetProGlnLysPheLeu 283  
851 GGGCAAGGGCTGTCCGACACGCCCTTACACAGTCCAGCTACGAGAAG 900  
283 lyAspLysCysLeuSerAspMetProTyrAspSerAlaAsnTyrGluLys 299  
901 GAGAACAAATGATGAAGTCCCACGTGATGGACCAAGCCCATCAACACGC 950  
300 Glu...AspMetMetThrSerHisValMetAspGlnAlaIleAsnAl 315  
951 CATCAACTACCTGGGGCCGAGTCCCTGGCCCGCTGGTGCACAGCCGCC 1000  
315 aIleAsnTyrLeuGlyAlaGluSerLeuArgProLeuValGlnThrProp 332  
1001 CGGGCGGTTCCGAGGTGGTCCCGGTTCATAGCCCGATGTACCAAGCTGCAC 1050  
332 roGlySerSerGluValValProValIleSerSerMetTyrGlnLeuHis 348  
1051 AGG...CGTCGGAGGCGACCCCGCGCTCCAACTCGGCCCCAGGACAG 1097  
349 LysProProSerAspGlyProProArgSerAsnHisSerAlaGlnAsp.. 364  
1098 CGCGCTGGAGTACCTGCTGCTCTCCAGGCGCAAGTTGGTCCCTCGG 1147

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|||||... |||||||... |||||||... ||| ||||
365 .AlaValAspAsnLeuLeuLeuSerIysAlaLysSerValSerG 381
1148 AGCGGAGGCGTCCCGAGCAACAGCTGCCAAGACTCCAGGACACCGAG 1197
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381 luArgGluAlaSerProSerAsnSerCysGlnAspSerThrAspThrGlu 397
1198 AGCAACAACGAGGAGGAGCGGCGCTTATCTACTGACCAACACAT 1247
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398 SerAsnAlaGluGluGlnArgSerGlyLeuIleTyrLeuThrAsnHis1 414
1248 CGCGCCGACGCGCGCAACGC...GTGTCGCTCAAGGAGGAGGAGCGCGCT 1294
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1295 AGCACTGCTGCGCGCGCGCTCCGAGAACTCGCAGGACGCGCTCCGCGTG 1344
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431 yrGluValLeuArgAlaAlaSerGluAsnSerGlnAspAlaPheArgVal 447
1345 GTGAGCAGGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1394
|||||... |||||||... |||||||... |||||||... |||||||...
448 ValSerThrSerGlyGluGlnLeuLysValTyrLysCysGluHisCysar 464
1395 GTGCTCTTCTGCTGATCAGCTATGTACACCATCCACATG...G 1435
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464 gValLeuPheLeuAspHisValMetTyrThrIleHisMetGlyCysHisG 481
1436 GCTGCCACGCTTCCGTGATCTCTTTAGTGCAACATGTGCGGCTACCCAC 1485
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481 lYcysHisGlyPheArgAspProPheGluCysAsnMetCysGlyTyrHis 497
1486 AGCAGGACGCGTACGAGTCTCGTCGCACATAACCGGAGGAGGAGGAGG 1535
|||||... |||||||... |||||||... |||||||... |||||||...
498 SerGlnAspArgTyrGluPheSerSerHisIleThrArgGlyGluHisar 514
1536 CTTCACATGAGC 1548
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514 gTyrHisLeuSer 518

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seq\_name: /cgn2\_6/ptodata/2/1aa/PCTUS\_COMB.psp:pct-US93-08743-5

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seq_documentation_block:
; Sequence 5, Application PC/TUS9308743
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
; NUMBER OF SEQUENCES: 152
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US93/08743
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 946,233
; FILING DATE: 14-SEP-1992
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)227-5941
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 568 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: internal
PCT-US93-08743-5

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alignment\_scores: Quality: 2422.00 Length: 571

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Ratio: 4.863 Gaps: 7
Percent Similarity: 87.215 Percent Identity: 82.137
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US-08-711-417c-165 x PCT-US93-08743-5
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1 MetAspValAspGluGlyGlnAspMetSerGlnValSerGlyLysGluSe 17
51 CCCCCCTGTAAAGCATCTCTCAGATGAGGGCGATGAGCCCATGCCATCC 100
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17 rProValSerAspThrProAspGluGlyAspGluProMetProValP 34
101 CCGAGGACCTCTCCACACCTCGGAGGAGGAGGAGGAGGAGGAGGAGGAG 150
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34 roGluAspLeuSerThrThrSerGlyAlaGlnGlnAsnSerLysSerAsp 50
151 AGAGTCGTGGCCAGTAAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGAA 200
|||||... |||||||... |||||||... |||||||... |||||||...
51 ArgGlyMetAlaSerAsnValLysValGluThrGlnSerAspGluGluAs 67
201 TGGGCGTCCCTGTGAATGAATGAGGGGAGAAATGTGCGGAGGATTTACGAA 250
|||||... |||||||... |||||||... |||||||... |||||||...
67 nGlyArgAlaCysGluMetAsnGlyGluGluCysAlaGluAspLeuArgM 84
251 TGCTGTATGCTCGGAGGAGAAATGAATGCTCCACAGGAGGAGGAGGAGG 300
|||||... |||||||... |||||||... |||||||... |||||||...
84 etLeuAspAlaSerGlyGluLysMetAsnGlySerHisArgAspGlnGly 100
300 ..... 300
101 SerSerAlaLeuSerGlyValGlyGlyIleArgLeuProAsnGlyLysLe 117
300 ..... 300
117 uLysCysAspIleCysGlyIleValCysIleGlyProAsnValLeuMetV 134
300 ..... 300
134 alHisLysArgSerHisThrGlyGluArgProPheGlnCysAsnGlnCys 150
301 AGCTCGGCTTTGTCGGGAGTTGGAGGATTCGACTTCTTAACGGAAACT 350
|||||... |||||||... |||||||... |||||||... |||||||...
151 SerSerAlaLeuSerGlyValGlyGlyIleArgLeuProAsnGlyLysLe 167
351 AAAGTGATATCTGTGGGATCATTTGCATCGGCGGCCCAATGTGCTCATGG 400
|||||... |||||||... |||||||... |||||||... |||||||...
167 uLysCysAspIleCysGlyIleValCysIleGlyProAsnValLeuMetV 184
401 TTCACAAAAGAACGCACACTGGAGAACGGCCCTTCCAGTCAATCAGTGC 450
|||||... |||||||... |||||||... |||||||... |||||||...
184 alHisLysArgSerHisThrGlyGluArgProPheGlnCysAsnGlnCys 200
451 GGGGCTCATTCACCCAGAGGGCAACTGTCTCGGCGACATCAAGCTGCA 500
|||||... |||||||... |||||||... |||||||... |||||||...
201 GlyAlaSerPheThrGlnLysGlyAsnLeuLeuArgHisIleLysLeuHi 217
501 TTCGGGGAGAGGCCCTTCAATGCCACCTCTGCAACTAGCCCTGCCGCC 550
|||||... |||||||... |||||||... |||||||... |||||||...
217 sSerGlyGluLysProPheLysCysHisLeuCysAsnTyrAlaCysArgA 234
551 GGAGGAGCGCCCTCACCTGGCCACCTGAGGAGGAGGAGGAGGAGGAGGAG 600
|||||... |||||||... |||||||... |||||||... |||||||...
234 rArgAspAlaLeuThrGlyHisLeuArgThrHisSerValGlyLysPro 250
601 CACAAATGTGGATATTGTGGCCGAGGAGCTATAAACAGCGCAACGCTCTTTAGA 650
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251 HisLysCysGlyTyrCysGlyArgSerTyrLysGlnArgSerSerLeuGl 267
651 GGAACATAAGAGCGCTGCCACAACTACTTGGAAAGCATGGGCTTCCCGG 700

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267 uGluHisLysGluArgCysHisAsnTyrLeuGluSerMetGlyLeuProG 284
701 GCACACTGACCCAGTCATTAAGAGAACTAAGCAGAGTGAATGGCA 750
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284 ly...MetTyrProValIleLysGluThrAsnHisAsnGluMetAla 299
751 GAAGACCTGTGAAGTAGATCAGAGAGATCTCTGGTCTGGACAGACT 800
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300 GluAspLeuCysLysIleGlyAlaGluArgSerLeuValLeuAspArgLe 316
801 AGCAAGTAATGTGCCAAACGTAAGAGCTCTATGCTCAGAAATTTCTG 850
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316 uAlaSerAsnValAlaLysArgLysSerMetProGlnLysPheLeuG 333
851 GGCACAAGGCGCTGTCGACAGCCCTCAGCAGTGCACGTAACGAGAAG 900
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333 lyAspLysCysLeuSerAspMetProTyrAspSerAlaAsnTyrGluLys 349
901 GAGAAGCAATGATGAAGTCCACGCTGATGGACCAAGCCATCAACAAGC 950
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350 Glu...AspMetMetThrSerHisValMetAspGlnAlaIleAsnAla 365
951 CATCACTACTGGGGGGGAGTCCCTGCTGGCCGCTGGTGCGACGCCCC 1000
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365 alLeAsnTyrLeuGlyAlaGluSerLeuArgProLeuValGlnThrProp 382
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382 roGlySerGluValProValProValIleSerMetTyrGlnLeuHis 398
1051 AGG...CGCTCGGAGGCGCCCGCTCCAACTCCGCGCCGACGACAG 1097
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399 LysProProSerAspGlyProProArgSerAsnHisSerAlaGlnAsp... 414
1098 CGCGGTGAGTACTGCTGCTGCTCTCCAGGCCAAGTTGGTCCCTCGG 1147
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415 .AlaValAspAsnLeuLeuLeuSerLysAlaLysSerValSerSerg 431
1148 AGCGCGAGGCGTCCCGAGCAACAGCTGCCAAGACTCCACGCGACCCGAG 1197
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431 luArgGluAlaSerProSerAsnSerCysGlnAspSerThrAspThrGlu 447
1198 AGCAACAACGAGGAGGAGCGAGCGGTCTTATCTACCTGACCAACACAT 1247
||||| ::||| ::||| ::||| ::||| ::||| ::||| ::|||
448 SerAsnAlaGluGluGlnArgSergGlyLeuIleTyrLeuThrAsnHisI 464
1248 CGCCCGACGCGCGCAACGC...GTGCTGCTCAAGGAGGACCGCGCT 1294
| ::||| ::||| ::||| ::||| ::||| ::||| ::|||
464 eAsnProHisAlaArgAsnGlyLeuAlaLeuLysGluGluGlnArgAla 481
1295 AGACCTGCTGCGCGCGCTCCGAGAACTCGCAGGACGCGCTCCGCGTG 1344
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481 yGluValLeuArgAlaAlaSerGluAsnSerGlnAspAlaPheArgVal 497
1345 GTCAGCACCGCGGGGAGGAGATGAAGGTCTAAGTGGCAACTGCGCG 1394
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498 ValSerThrSergGlyGluGlnLeuLysValTyrLysCysGluHisCysAr 514
1395 GGTGCTCTCTGCTGATCAGTCTATGTACACCATCCACATG.....G 1435
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564 gTyrHisLeuSer 568
seq_name: /cgn2_6/ptodata/2/iaa/5B_COMB pep:us-08-465-590-153
seq_documentation_block:
; Sequence 153, Application US/08465590
; Patent No. 5824770
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
; NUMBER OF SEQUENCES: 164
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 STATE STREET, Suite 510
; CITY: BOSTON
; STATE: MASSACHUSETTS
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII (text)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/465,590
; FILING DATE: 05-JUN-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/238,212
; FILING DATE: 02-MAY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/121,438
; FILING DATE: 14-SEP-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/946,233
; FILING DATE: 14-SEP-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Myers, Paul L.
; REGISTRATION NUMBER: 35,695
; REFERENCE/DOCKET NUMBER: MPG-006C2DV
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)227-5941
; INFORMATION FOR SEQ ID NO: 153:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 470 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: C-terminal
; US-08-465-590-153

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Ratio: 5.098 Gaps: 3
Percent Similarity: 92.521 Percent Identity: 90.385

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19 acysGluMetAsnGlyGluGluCysAlaGluAspLeuArgMetLeuAsp 36
260 CCTCGGAGAGAAAATGAATGGCTCCACAGGACCAAGGACGAGTCCGCT 309
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36 laSerGlyGluLysMetAsnGlySerHisArgAspGlnGlySerSerAla 52
310 TTGTCGGAGATTGGAGCAATTCGACTTCCTTAAGGAAACCTAAAGTGTGA 359
53 LeuSerGlyValGlyGlyLeuArgLeuProAsnGlyLysLeuLysCysAs 69
360 TATCTGTGGGATCATTTGCATCGGCGCCCAATGTGCTCATGTTCACAAA 409
69 pIleCysGlyIle***CysIleGlyProAsnValLeuMetValHisLysA 86
410 GAAGCCACACTGTGAGAACGCCCTTCCAGTGAATCAGTCGCGGGCTCA 459
86 rgSerHisThrGlyGluArgProPheGlnCysAsnGlnCysGlyAlaSer 102
460 TTCACCCAGAGGCAACCTGTCTCCGGCACATCAAGCTCATTCGGGGA 509
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169 sGluArgCysHisAsnTyrLeuGluSerMetGlyLeuProGly***** 186
710 ACCAGCTATTAAAGAGAACTAAGCAGAGTGAATGCGAAGACCTG 759
186 **ProValIleLysGluGluThr***His***GluMetAlaGluAspLeu 202
760 TCAAGATAGGATCAGAGATCTCTGCTGCTGGACAGACTAGCAAGTAA 809
203 CysLysIleGly**GluArgSerLeuValLeuAspArgLeuAlaSerAs 219
810 TGTCCGCAACCTAAGAGCTCTATCCTCAGAAATTTCTGGGACAAAG 859
219 nValAlaLysArgLysSerSerMetProGlnLysPheLeuGlyAspLys* 236
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236 **LeuSerAsp***ProTyrAspSerAla***TyrGluLysGlu***** 252
910 ATGATGAAGTCCCGCTGATGGACCAAGCCATCAACAGCCATCACTA 959
253 MetMet***SerHisValMetAsp***AlaIleAsnAlaIleAsnTy 269
960 CTTGGGGCGGAGTCCCTGCGCGCTGGTGCAGACGCCCGCGCGGTT 1009
269 rLeuGlyAlaGluSerLeuArgProLeuValGlnThrProProGly***S 286
1010 CCGAGGTGTCCTGCTCATAGCCGATGATACAGCTGCAC...AGCGC 1056
286 eGluValValProValIleSerProMetTyrGlnLeuHis***** 302
1057 TCGGAGGCGCCCGCTCCCAACACTCGGCGCCGAGGACGCGCTGGA 1106
303 Ser***Gly***ProArgSerAsnHisSerAlaGlnAsp***AlaVal** 319
1107 GTACCTGCTGCTCTCCAGGCGCAAGTGTGGTCCCTCGAGCGCGAGG 1156
319 ***LeuLeuLeuLeuSerLysAlaLys***Val***SerGluArgGluA 336
1157 GGTCCCGGAGCAACAGCTGCGCAACACTCCAGGACACCGAGCAACAC 1206
336 laSerProSerAsnSerCysGlnAspSerThrAspThrGluSerAsn*** 352

1207 GAGGAGCAGCGAGCGTCTTATCTACTGACCAACACACATCGCCCGACG 1256
333 GluGluGlnArgSerGlyLeuIleTyrLeuThrAsnHisLle***** 369
1257 CGCG...CAAGCGCTGTGCTCAAGGAGGAGCAGCGCGCTTACGACCTGC 1303
369 *Ala*****LeuLysGluGlu***ArgAlaTyr*****L 386
1304 TCGCGCGCGCTCCGAGAACTCGCAGAGCGCGCTCCGGTGGTGCAGCAC 1353
386 euArgAlaAlaSerGluAsnSerGlnAspAla***ArgValValSerThr 402
1354 AGCGGGAGCAGATGAGGTGTACAAGTGCAGACACTGCCGGGTGCTCTT 1403
403 SerGlyGluGln***LysValTyrLysCysGluHisCysArgValLeuPh 419
1404 CCTGGATCAGCTCATGTACACCATCCACATG.....GGCTGCCACG 1444
419 eLeuAspHisValMetTyrThrIleHisMet*****GlyCysHisG 436
1445 GCTTCCGTGATCCTTTGAGTGCAACATGTCCGGCTACCAAGCCAGCAC 1494
436 lYPheArgAspPropheGluCysAsnMetCysGlyTyrHisSerGlnAsp 452
1495 CGGTACGAGTTCTCTGTCGCACATAACGCGAGGGGAGCAGCGCTTCCACAT 1544
453 ArgTyrGluPheSerSerHisIleThrArgGlyGluHisArg***His** 469
1545 GAGC 1548
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seq_documentation_block:
; Sequence 13, Application US/08283300A
; Patent No. 6172278
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS TRANSGENIC CELLS AND ANIMALS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 STATE STREET, Suite 510
; CITY: BOSTON
; STATE: MASSACHUSETTS
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Ascii (text)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/283,300A
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/238,212
; FILING DATE: 02-MAY-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/121,438
; FILING DATE: 14-SEP-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/946,233
; FILING DATE: 14-SEP-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Myers, Paul L.
; REGISTRATION NUMBER: 35,695
; REFERENCE/DOCKET NUMBER: MGP-027
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)227-5941
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; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 470 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: C-terminal
; US-08-283-300A-13

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alignment_scores:
  Quality: 2207.50      Length: 468
  Ratio: 5.098          Gaps: 3
  Percent Similarity: 92.521  Percent Identity: 90.385

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alignment_block:
US-08-711-417C-165 x US-08-283-300A-13 ..

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19 acysGluMeAsnGlyGluGluCysAlaGluAspLeuArgMeLeuAspA 36
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36 laSerGlyGluLysMetAsnGlySerHisArgAspGlnGlySerSerAla 52
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310 TTGTCTGGAGTTGGAGCATTCGACTTCCTAACGGAAACTAAAGTGTGA 359
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53 LeuSerGlyValGlyGlyIleArgLeuProAsnGlyLysLeuLysCysAs 69
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360 TATCTGTGGGATCATTTGTCATCGGGCCCAATGTCTCATGTTCACAAAA 409
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410 GAAGCCACACTGGAGAACGCCCTTCAGTGCAATCAGTCGGGGCTCA 459
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86 rgSerHisThrGlyGluArgProPheGlnCysAsnGlnCysGlyAlaSer 102
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460 TTCACCCAGAGGCGCAACCTGCTCCGCGCACATCAAGCTGCATTCCGGGA 509
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103 PheThrGlnLysGlyAsnLeuLeuArgHisIleLysLeuHisSerGlyGI 119
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510 GAAGCCCTTCAAAATGCCACCTCTGCAACTACGCTCGCCCGCGGAGGAG 559
|||||
119 uLysProPheLysCysHisLeuCysAsnTyrAlaCysArgArgAspA 136
|||||
560 CCCTCACTGGCCACTCAGAGCGGCTCGGTGTAACCTCACAATGT 609
|||||
136 laLeuThrGlyHisLeuArgThrHisSerValGlyLysProHisLysCys 152
|||||
610 GGATATTGTGCCGAAGCTATAAACAGCAAGCTCTTTAGAGGAACATAA 659
|||||
153 GlyTyrCysGlyArgSerTyrLysGluArg***SerLeuGluGluHisLy 169
|||||
660 AGAGCGCTGCCACACACTACTTGTGAAGCATGGGCTTCGGGGCACACTGT 709
|||||
169 sGluArgCysHisAsnTyrLeuGluSerMetGlyLeuProGly***** 186
|||||
710 ACCAGTCATTAAAGAGAACTAAGCAGTGAATGGCAGAGACCTG 759
|||||
186 **ProValIleLysGluThr***His***GluMetAlaGluAspLeu 202
|||||
760 TCGAAGATAGGATCAGAGAGATCTCTCGTGTGCAGACACTAGCAAGTAA 809
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203 CysLysIleGly***GluArgSerLeuValLeuAspArgLeuAlaSerAs 219
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810 TGTGCGCAACAGTAAGAGCTCTATGCTCAGAAATTTCTTGGGACAAG 859
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860 GCCTGTCCGACAGCCCTACGACAGTCCACGAGTACGAGAGAGAGAA 909
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236 **LeuSerAsp***ProTyrAspSerAla***TyrGluLysGlu***** 252
|||||
910 ATGATGAAGTCCACAGTGATGGCAAGCCATCAACAACGCCCATCACTA 959
|||||
253 MetMet***SerHisValMetAsp***AlaIleAsnAlaIleAsnTy 269
|||||
960 CCTGGGGCGGAGTCCCTGCGCCCGTGGTGCAGACGCCGCCCGGGCGGTT 1009
|||||
269 rLeuGlyAlaGluSerLeuArgProLeuValGlnThrProProGly***S 286
|||||
1010 CCGAGGTGGTCCCGGTCATCAGCCCGGATGACAGCTGCAC...AGCGCG 1056
|||||
286 erGluValValProValIleSerProMetTyrGlnLeuHis***** 302
|||||
1057 TCGGAGGCGACCCCGGCTCCAACTCCGCGCCAGGACAGCGCCGTGA 1106
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303 Ser***Gly***ProArgSerAsnHisSerAlaGlnAsp***AlaVal** 319
|||||
1107 GTACTGTCTGTCTCTCCAAAGCCAAAGTTGGTGCCTTCGGAGCGCGAG 1156
|||||
319 ***LeuLeuLeuSerLysAlaLys***Val***SerGluArgGlu 336
|||||
1157 CGTCCCGGAGCAACAGCTGCCAAGACTCCAGGACACCGAGAGCAACAAC 1206
|||||
336 laSerProSerAsnSerCysGlnAspSerThrAspThrGluSerAsn*** 352
|||||
1207 GAGGAGCAGCGCGGCTCTTACTACTGACCAACACATCGCCCGCGAG 1256
|||||
353 GluGluGlnArgSerGlyLeuIleTyrLeuThrAsnHisIle***** 369
|||||
1257 CGCG...CAACCGCTGCTCGCTCAAGGAGGACCGCGCTTACGACCTG 1303
|||||
369 *Ala*****LeuLysGluGlu***ArgAlaTyr*****L 386
|||||
1304 TCGCGCGCGCTCCGAGAACTCGCAGGACGCGCTCCGCGTGGTCAGCAC 1353
|||||
386 euArgAlaAlaSerGluAsnSerGlnAspAla***ArgValValSerThr 402
|||||
1354 ACGGGGAGCAGATCAAGGTGTACAGTGCGAAGCTCCCGGGTGCCTTT 1403
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403 SerGlyGluGln***LysValTyrLysCysGluHisCysArgValLeuPh 419
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1404 CCTGGATCAGCTCATGTATACCATCCACATG.....GGCTGCCACG 1444
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419 euLeuAspHisValMetTyrThrIleHisMet*****GlyCysHisG 436
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1445 GCTTCCTCGTATCCTTTTGTAGTGCAACATGTGGGGTACCAGACGAGGAC 1494
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436 LysPheArgAspProPheGluCysAsnMetCysGlyTyrHisSerGlnAsp 452
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1495 CGGTACGAGTTCCTCGTCACATACGCGAGGAGGAGCACCGCTTCCACAT 1544
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453 ArgTyrGluPheSerSerHisIleThrArgGlyGluHisArg***His** 469
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1545 GAGC 1548
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469 *Ser 470

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seq_name: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:PCT-US95-09345-13
seq_documentation_block:
; Sequence 13, Application PC/TUS9509345
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS TRANSGENIC CELLS AND ANIMALS
; NUMBER OF SEQUENCES: 26
; CORRESPONDENCE ADDRESS:

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; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 STATE STREET, Suite 510
; CITY: BOSTON
; STATE: MASSACHUSETTS
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII (text)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/09345
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/283,300
; FILING DATE: 29-JULY-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/238,212
; FILING DATE: 02-MAY-94
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/121,438
; FILING DATE: 14-SEP-1993
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/946,233
; FILING DATE: 14-SEP-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Myers, Paul L.
; REGISTRATION NUMBER: 35,695
; REFERENCE/DOCKET NUMBER: MGP-027PC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)227-5941
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 470 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: C-terminal
; PCT-US95-09345-13

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alignment_scores:
  Quality: 2207.50      Length: 468
  Ratio: 5.098          Gaps: 3
  Percent Similarity: 92.521  Percent Identity: 90.385

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alignment_block:

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US-08-711-417C-165 x PCT-US95-09345-13

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Align seg 1/1 to: PCT-US95-09345-13 from: 1 to: 470

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160 GCAGTAATGTTAAAGTAGAGACTCAGAGTGATGAAGAGATGGCGTGC 209
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3 AlaSerAsnValLysValGluThrGlnSerAspGluGluAsnGlyArgAl 19
|||||
210 CTTGTAATGAATGGGGAAGATGTCGGAGGATTACGAATGCTTGATG 259
|||||
19 aCysGluMetAsnGlyGluGluCysAlaGluAspLeuArgMetLeuAsp 36
|||||
260 CTTCCGGAGAGAAAATGAATGGCTCCACAGGACCAAGGCGATCGGCT 309
|||||
36 laSerGlyLysMetAsnGlySerHisArgAspGlnGlySerSerAla 52
|||||
310 TTGTCGGGAGTTGGAGGATTCGACTTCCTAACGGAAAAATAAGTGTA 359
|||||
53 LeuSerGlyValcylglylleargLeuProAsnGlyLysLeuLysCysAs 69
|||||
360 TATCTCTGGGATCATTTGCATCGGCGCCCAATGCTCATGTTGCACAAA 409
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69 pileCysGlyIle***CysIleGlyProAsnValLeuMetValHisLysA 86

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410 GAAGCCACACTGGAGAAGCGCCTTCCAGTGCAATCAGTGGGGCCTCA 459
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86 rgSerHisThrGlyGluArgProPheGlnCysAsnGlnCysGlyAlaSer 102
|||||
460 TTCACCCAGAGGCAACCTGCTCCGGCACATCAAGCTGCATTCGGGGA 509
|||||
103 PheThrGlnLysGlyAsnLeuLeuArgHisIleLysLeuHisSerGlyG1 119
|||||
510 GAAGCCCTTCAATGCCACCTCTGCAACTACGCTGCCCGCGGAGGAGC 559
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119 ulysProPheLysCysHisLeuCysAsnTyrAlaCysArgArgAspa 136
|||||
560 CCTCACTGGCCACCTGAGGACGCACTCGTTGGTAAACCTCACAAATGT 609
|||||
136 laLeuThrGlyHisLeuArgThrHisSerValGlyLysProHisLysCys 152
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610 GGATATTGTGGCCGAAGCTATAACAGCGAAGCTCTTTAGAGGAACATAA 659
|||||
153 GlyTyrCysGlyArgSerTyrLysGlnArg***SerLeuGluGluHisLy 169
|||||
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169 sGluArgCysHisAsnTyrLeuGluSerMetGlyLeuProGly***** 186
|||||
710 ACCCAGTCATTAAAGAGAACTAAGCACAGTGAATGGCAGAGACCTG 759
|||||
186 **ProValIleLysGluGluThr***His***GluMetAlaGluAspLeu 202
|||||
760 TCGAAGATAGGATCAGAGAGATCTCTCGTGTGGACAGACTAGCAAGTAA 809
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203 CysLysIleGly***GluArgSerLeuValLeuAspArgLeuAlaSerAs 219
|||||
810 TGTGCGCAACGTAAGAGCTCTATGCTCAGAAATTTCTGGGCGACAAGG 859
|||||
219 nValAlaLysArgLysSerSerMetProGlnLysPheLeuGlyAspLys* 236
|||||
860 GCCTGTCCGACACGCCCTTACGACAGTCCACGTACGAGAGAGGAGAACGA 909
|||||
236 **LeuSerAsp***ProTyrAspSerAla***TyrGluLysGlu***** 252
|||||
910 ATGATGAAGTCCACGTCAGTCCACCAAGCCATCAACACGCCATCAACTA 959
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253 MetMet***SerHisValMetAsp***AlaIleAsnAlaIleAsnTy 269
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960 CTTGGGGCGGAGTCCCTGCGCCGCTGGTGCAGACGCCCGCGCGGTT 1009
|||||
269 rLeuGlyAlaGluSerLeuArgProLeuValGlnThrProProGly***S 286
|||||
1010 CCGAGGTGGTCCCGGTCAATCAGCCCGATGTACCAGTGCAC...AGCGCG 1056
|||||
286 erGluValValProValIleSerProMetTyrGlnLeuHis***** 302
|||||
1057 TCGGAGGCGCACCCGCGCTCCACCACTCGGCCCGCCAGGACGCGCGTGA 1106
|||||
303 Ser***Gly***ProArgSerAsnHisSerAlaGlnAsp***AlaVal** 319
|||||
1107 GTACCTGCTGCTCTCTCCAAAGCCAAAGTTGGTGCCTCGGAGCGCGAG 1156
|||||
319 ***LeuLeuLeuLeuSerLysAlaLys***Val***SerGluArgGluA 336
|||||
1157 CGTCCCGGAGCAACAGCTGCCAGACTCCACGGACACCGGAGAGCAAC 1206
|||||
336 laSerProSerAsnSerCysGlnAspSerThrAspThrGluSerAsn*** 352
|||||
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353 GluGluGlnArgSerGlyLeuIleTyrLeuThrAsnHisIle***** 369
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369 *Ala*****LeuLysGluGlu***ArgAlaTyr*****L 386

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1304 TGCAGCGCGCGCTCCGAGAACTCCAGAGACGCGCTCGCGTGGTCTAGCACC 1353
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1354 AGCGGGGAGCAGATGAGGTGTACAGTGGACACTGCGGGTGCTCTT 1403
|||||
403 SerGlyGluGln**LysValTyrLysCysGluHisCysArgValLeuPh 419
|||||
1404 CCTGGATCAGTCATGTACACCATCCACATG.....GGCTGCCACG 1444
|||||
419 eLeuAspHisValMetTyrThrIleHisMet*****GlyCysHisG 436
|||||
1445 GCTTCGCTGATCCTTTTGTAGTCAACATGTGGGCTACACAGCCAGGAC 1494
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436 LysPheArgAspProPheGluCysAsnMetCysGlyTyrHisSerGlnAsp 452
|||||
1495 CGGTACAGTTCCTCGTCGCACATAACGCGAGGGAGCAGCGTCCACAT 1544
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453 ArgTyrGluPheSerSerHisIleThrArgGlyGluHisArg***His** 469
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469 *Ser 470

seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pap:us-08-711-417c-153

seq documentation_block:
; Sequence 153, Application US/08711417C
; Patent No. 6228611
;
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
; NUMBER OF SEQUENCES: 202
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110-2804
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: FastSeq for Windows Version 2.0b
;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/711,417C
; FILING DATE: 05-Sep-1996
;
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/238,212
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 08/121,438
; FILING DATE: 14-SEP-1993
; APPLICATION NUMBER: 07/946,233
; FILING DATE: 14-SEP-1992
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Myers, Louis P.
; REGISTRATION NUMBER: 35,965
; REFERENCE/DOCKET NUMBER: 10287/007001
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
;
; INFORMATION FOR SEQ ID NO: 153
; SEQUENCE CHARACTERISTICS:
; LENGTH: 470 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FRAGMENT TYPE: C-terminal
; FEATURE:
; NAME/KEY: Other
; LOCATION: 1...470

OTHER INFORMATION: Xaa = any amino acid
SEQUENCE DESCRIPTION: SEQ ID NO: 153:
US-08-711-417C-153

alignment_scores:
Quality: 2202.50 Length: 468
Ratio: 5.087 Gaps: 3
Percent Similarity: 92.521 Percent Identity: 90.171

alignment_block:
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3 AlaSerAsnValLysValIleThrGlnSerAspGluGluAspGlyArgAl 19
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19 acysgluMetAsnGlyGluGluCysAlaGluAspLeuArgMetLeuAsp 36
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36 laSerGlyGluLysMetAsnGlySerHisArgAspGlnGlySerSerAla 52
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310 TTGTCGGAGTTGGAGCATTCGACTTCCTTAACGAAACCTAAAGTGTGA 359
|||||
53 LeuSerGlyValGlyIleArgLeuProAsnGlyLysLeuLysCysAs 69
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360 TATCTGTGGGATCATTTGTCATCGGGCCCAATGTCTCATGTGTTACAAA 409
|||||
69 pileCysGlyIle***CysIleGlyProAsnValLeuMetValHisLys 86
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410 GAAGCCACACTGGAGACGGCCCTTCCAGTGCATCAATCACTGCGGCGCTCA 459
|||||
86 rgSerHisThrGlyGluArgProPheGlnCysAsnGlnCysGlyAlaSer 102
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460 TTCACCCAGAGGGCAACCTGCTCCGGGCACATCAAGCTGCATTCGGGGA 509
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103 PheThrGlnLysGlyAsnLeuLeuArgHisIleLysLeuHisSerGly 119
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510 GAAGCCCTTCAATGCCACTCTGCACTACGCCCTGCGCGGAGGAGCAG 559
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136 laLeuThrGlyHisLeuArgThrHisSerValGlyLysProHisLysCys 152
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610 GGATATTGTGGCCGAGCTATTAACAGCGAAGCTCTTTAGAGAACATAA 659
|||||
153 GlyTyrCysGlyArgSerTyrLysGlnArg***SerLeuGluGluHis 169
|||||
660 AGAGCGCTGCCACACTACTTGGAAAGCATGGGCGCTTCGGGCACACTGT 709
|||||
169 sGluArgCysHisAsnTyrLeuGluSerMetGlyLeuProGly***** 186
|||||
710 ACCAGTCTATTAAAGAAAGAACTAAGCAGCTGAATGCCAGAACCTGT 759
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186 **ProValIleLysGluGluThr***His***GluMetAlaGluAspLeu 202
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760 TGCAAGATAGGATCAGAGAGATCTCTCGTGTGGACAGACTAGCAAGTAA 809
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203 CysLysIleGly***GluArgSerLeuValLeuAspArgLeuAlaSerAs 219
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810 TGTGCGCAACAGTAAAGAGCTCTATGCTCAGAAATTTCTTGGGACAAAG 859
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219 nValAlaLysArgLysSerSerMetProGlnLysPheLeuGlyAspLys* 236
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860 GCTGTCCGACAGCGCCTACGACAGTGCACAGTGCACAGAGGAGACGAA 909
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  Quality: 1963.00      Length: 521
  Ratio: 4.776          Gaps: 6
  Percent Similarity: 78.887  Percent Identity: 74.280

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51  CCCCCCTGTAAAGCATCTCCAGATCAGGCGGATGAGCCCATGCCATCC 100
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17  rProProValSerAspThrProAspGluGlyAspGluProMetProValP 34
101 CCGAGGACCTCTCCACCCTCGGGAGGACAGCAAGATCTCCAAAGAGTGC 150
  |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::
34  rGluAspLeuSerThrThrSerGlyAlaGlnGlnAsnSerLysSerAsp 50
151 AGAGTCGTGTGGCCAGTAAGTCTTAAACTAGAGACTCAGATGATGAAGAA 200
  |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::
51  ArgGlyMetAlaSerAsnValLysValGluThrGlnSerAspGluGluAs 67
201 TGGCGTGCCTGTGAATGAATGTGGGAAGAATGTCGGGAGGATTTCACAA 250
  |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::
67  nGlyArgAlaCysGluMetAsnGlyGluLucysAlaGluAspLeuArgM 84
251 TGCTTGATGCTCGGAGAGAAATGTAAATGCTCCACAGGACCAAGGC 300
  |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::
84  etLeuAspAlaSerGlyGluLysMetAsnGlySerHisArgAspGlnGly 100
301 AGCTCGGCTTGTTCGGAGATTGGAGGACTTCGACTTCTTACAGGAAACT 350
  |||||:::|||||:::|||||:::|||||:::|||||:::|||||:::
101 SerSerAlaLeuSerGlyValGlyGlylleGargLeuProAsnGlyLysLe 117

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151 ACAGTCGTGGCCAGTAATGTTAAACTGAGACTCAGAGTGATGAAGAGA 200  
||| :|||  
51 ArgGlyMetAlaSerAsnValLysValGluThrGlnSerAspGluGluAs 67  
201 TGGCGTGCCTGTGAATAATGCGGAAGAATGTCGGAGGATTACCAA 250  
|||||  
67 nGlyArgAlaCysGluMetAsnGlyGluGluCysAlaGluAspLeuArgM 84  
251 TGCTTGATGCCCTCGGAGAGAAAATGAATGCTCCACAGGACCACAGGC 300  
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84 etLeuAspAlaSerGlyGluLysMetAsnGlySerHisArgAspGlnGly 100  
301 AGCTGGCGTTGTGTCGGAGTGTGGAGCATTCGACTCTCTACCGAAAACT 350  
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101 SerSerAlaLeuSerGlyValGlyGlylleGargLeuProasnGlyLysLe 117

us-08-711-417c-165.ra1

Wed Aug 28 10:05:45 2002

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351 AAAGTGTGATATCTGGGATCATTTGATCGGCGCCCAATGTGCTCATGG 400
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117 uLysCysAspIleCysGlyIleValCysIleGlyProAsnValLeuMetV 134
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401 TTCAAAAGAACCCACTGGAGAACGCCCTTCCAGTGCATCAGTGC 450
|||||
134 alHisLysArgSerHisThrGlyGluArgProPheGlnCysAsnGlnSer 150
|||||
451 GGGGCTCATTCACCCAGAGAGGCAACCTGCTCCGGCACATCAAGCTGCA 500
|||||
151 GlyAlaSerPheThrGlnLysGlyAsnLeuLeuArgHisIleLysLeuHi 167
|||||
501 TTCCGGGAGAGAGCCCTTCAATGCCACCTCTCCAACTAGCGCTCGCCG 550
|||||
167 sSerGlyGluLysProPheLysCysHisLeuCysAsnTyrAlaCysArgA 184
|||||
551 GGAGGAGCGCCTCAGTGGCCACCTGAGGACGCACTCCGTTGGTGAACCT 600
|||||
184 rArgAspAlaLeuThrGlyHisLeuArgThrHisSer..... 196
601 CACAAATGTGGATATTGTGGCCGAAGCTATAAACAGCGAAGCTCTTAGA 650
196 ..... 196
651 GGAACATAAGAGCGCTCCACACTACTTGGAAAGCATGGCTTCGG 700
196 ..... 196
701 GCACACTGTACCCAGTCATTAAGAAAGAACTAAGCACAGTGAATGGCA 750
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751 GAAGACCTGTGAAGATAGGATCAGAGACTCTCTCGTGTGGACAGACT 800
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801 AGCAAGTAATGTGCGCAACGTAAGAGCTCTATGCTCAGAAATTTCTTG 850
197 ..... 197
851 GGGACAGAGCGCTTCCGACAGCGCCCTACGACAGTGCCACGTACGAGAAG 900
|||||
197 lyAspLysCysLeuSerAspMetProTyrAspSerAlaAsnTyrGluLys 213
901 GAGAACGAAATGATGAGTCCCGTCCAGTGGAGCAACAGCCATCAACAGC 950
|||||
214 Glu...AspMetMetThrSerHisValMetAspGlnAlaIleAsnAl 229
951 CATCACTACTGGGGCGCGGCTCCCTGCGCGCGCTGGTGCAGACGCCCC 1000
|||||
229 aIleAsnTyrLeuGlyAlaGluSerLeuArgProLeuValGlnThrProp 246
1001 CGGGCGGTTCGAGGTGGTCCCGGTATCATCAGCCCGATGTACAGCTGCAC 1050
|||||
246 roGlySerSerGluValProValIleSerSerMetTyrGlnLeuHis 262
1051 AGG...CGCTCGGAGGACCCCGCTCCCAACCTCCGCGCCAGCAGACAG 1097
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263 LysProSerAspGlyProProArgSerAsnHisSerAlaGlnAsp... 278
1098 CGCGCTGGAGTACCTGCTGCTGCTCTCAAGGCCAAGTTGGTCCCTCGG 1147
|||||
279 .AlaValAspAsnLeuLeuLeuSerLysAlaLysSerValSerSerG 295
1148 AGCGGAGCGGTCCCGGAGCAACAGCTCCAGACTCCAGCACACCGAG 1197
|||||
295 luArgGluAlaSerProSerAsnSerCysGlnAspSerThrAspThrGlu 311
1198 AGCAACAGCAGGAGCAGCGAGCGGTCTTACTACCTTGACCAACACCAT 1247
|||||
312 SerAsnAlaGluGlnArgSerGlyLeuIleTyrLeuThrAsnHisI 328
1248 CGCCCGACGCGCGCAACGC...GTGTCGCTCAAGGAGGAGCAGCGCGCT 1294

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328 eAsnProHisAlaArgAsnGlyLeuAlaLeuLysGluGlnArgAlaT 345
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1295 AGCACTGCTGGCGCGCCCTCCGAGAACTCCGAGGAGCGCTCCGCGTG 1344
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345 yrGluValLeuArgAlaAlaSerGluAsnSerGlnAspAlaPheArgVal 361
|||||
1345 GTCAAGCAGCAGCGGAGCAGATGAGGTGTACAGTGCAGAACACTGCGG 1394
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362 valSerThrSerGlyGluGlnLeuLysValTyrLysCysGluHisCysAr 378
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1395 GTGCTCTTCCCTGATCATGTATGATACCATCCACATG.....G 1435
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1436 GCTGCCACGCTTCCGTGATCCTTTTGTGTCGACATGTGCGCTTACCAC 1485
|||||
395 lyCysHisGlyPheArgAspPropPheGluCysAsnMetCysGlyTyrHis 411
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1486 AGCAGGACCGGTACGAGTTCCTGTCGACATTAACGAGGAGGAGCAGCG 1535
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412 SerGlnAspArgTyrGluPheSerSerHisIleThrArgGlyGluHisAr 428
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428 gTyrHisLeuSer 432
seq_name: /cgn2_6/ptodata/2/1aa/6B_COMB.pep:us-08-711-417c-195
seq_documentation_block:
; Sequence 195, Application US/08711417C
; Patent No. 6228611
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
; NUMBER OF SEQUENCES: 202
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/711,417C
; FILING DATE: 05-Sep-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/238,212
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 08/121,438
; FILING DATE: 14-SEP-1993
; APPLICATION NUMBER: 07/946,233
; FILING DATE: 14-SEP-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Myers, Louis P.
; REGISTRATION NUMBER: 35,965
; REFERENCE/DOCKET NUMBER: 10287/007001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 195:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 431 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: internal

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US-08-711-417C-195

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alignment_scores:
  Quality: 1923.50      Length: 521
  Ratio: 4.703          Gaps: 7
  Percent Similarity: 78.503  Percent Identity: 73.129

alignment_block:
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1  MetAspValAspGluGlnAspMetSerGlnValSerGlyLysGlu 17
|||||:|||||:|||||:|||||:|||||:|||||:|||||:
51  CCCCCCTGTAAGCGTACTCCAGATGAGGCGGATGAGCCATGCCGATCC 100
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seq_documentation_block:
; Sequence 201, Application US/08711417C
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Patent No. 6228611  
GENERAL INFORMATION:  
APPLICANT: Georgopoulos, Katia A.  
TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE  
NUMBER OF SEQUENCES: 202  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: USA  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: Windows 95  
SOFTWARE: FASTSEQ for Windows Version 2.0b  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/711.417C  
FILING DATE: 05-Sep-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/238,212  
FILING DATE: 02-MAY-1994  
APPLICATION NUMBER: 08/121,438  
FILING DATE: 14-SEP-1993  
APPLICATION NUMBER: 07/946,233  
FILING DATE: 14-SEP-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Myers, Louis P.  
REGISTRATION NUMBER: 35,965  
REFERENCE/DOCKET NUMBER: 10287/007001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 201:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 334 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
FRAGMENT TYPE: Internal  
SEQUENCE DESCRIPTION: SEQ ID NO: 201:  
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; Patent No. 6228611
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
; NUMBER OF SEQUENCES: 202
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110-2804
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows 95
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/711,417C
; FILING DATE: 05-Sep-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/238,212
; FILING DATE: 02-MAY-1994
; APPLICATION NUMBER: 08/121,438
; FILING DATE: 14-SEP-1993
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; APPLICATION NUMBER: 07/946,233
; FILING DATE: 14-SEP-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Myers, Louis P.
; REGISTRATION NUMBER: 35,965
; REFERENCE/DOCKET NUMBER: 10287/007001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617/542-5070
; TELEFAX: 617/542-8906
; TELEX: 200154
; INFORMATION FOR SEQ ID NO: 200:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 376 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; FRAGMENT TYPE: Internal
; SEQUENCE DESCRIPTION: SEQ ID NO: 200:
US-08-711-417C-200
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seq\_documentation\_block:

; Sequence 175, Application US/08711417C

; Patent No. 6228611

; GENERAL INFORMATION:

; APPLICANT: Georgopoulos, Katia A.

; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE

; NUMBER OF SEQUENCES: 202

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Fish & Richardson P.C.

; STREET: 225 Franklin Street

; CITY: Boston

; STATE: MA

; COUNTRY: USA

; ZIP: 02110-2804

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette

; COMPUTER: IBM Compatible

; OPERATING SYSTEM: Windows 95

; SOFTWARE: FastSeq for Windows Version 2.0b

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/711,417C

; FILING DATE: 05-Sep-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 08/238,212

; FILING DATE: 02-MAY-1994

; APPLICATION NUMBER: 08/121,438

; FILING DATE: 14-SEP-1993

; APPLICATION NUMBER: 07/946,233

; FILING DATE: 14-SEP-1992

; ATTORNEY/AGENT INFORMATION:

; NAME: Myers, Louis P.

; REGISTRATION NUMBER: 35,965

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; INFORMATION FOR SEQ ID NO: 175:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 236 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: protein

; SEQUENCE DESCRIPTION: SEQ ID NO: 175:

US-08-711-417C-175

alignment\_scores:

Quality: 1210.00

Ratio: 5.216

Percent Similarity: 98.305

Percent Identity: 97.881

alignment\_block:

US-08-711-417C-165 x US-08-711-417C-175 ..

Align seg 1/1 to: US-08-711-417C-175 from: 1 to: 236

850 GGGACAAGGCGCTGCGGACAGCGCCCTAGCAGTGCACGACGACGAGAA 899

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1 GlyAspLysGlyLeuSerAspThrProTyrAspSerAlaThrTyrGlu 17
900 GGAGAACGAATGATGAAGTCCACAGTGATGGACCAAGCATCAACAACG 949
17 sGluAsnGluMetMetLysSerHisValMetAspGlnAlaIleAsnAsn 34
950 CCATCAACTACCTGGGGCCGAGTCCCTGGCCCGCTGGTGGTGCAGACGCC 999
34 laIleAsnTyrLeuGlyAlaGluSerLeuArgProLeuValGlnThrPro 50
1000 CCGGGCGGTTCCGAGGTGGTCCCGGTCATCAGCCCGATGTACCAAGTGA 1049
51 ProGlyGlySerGluValProValIleSerProMetTyrGlnLeuHi 67
1050 CAGCGCTCGGAGGACACCGCGCTCCAAACCATCGGCCCGCAGACGCG 1099
67 sArgArgSerGluGlyThrProArgSerAsnHisSerAlaGlnAsnSer 84
1100 CCGTGGAGTACCTGCTGCTGCTCTCCAGGCCAAGTTG..... 1137
84 laValGluTyrLeuLeuLeuSerLysAlaLysLeuGluLysLys 100
1138 GTGCCCTCGGAGCGAGGCGTCCCGGACCAACAGCTGCCAAGACTCCAC 1187
101 ValProSerGluArgGluAlaSerProSerAsnSerCysGlnAspSerTh 117
1188 GGACACCGAGAGCAACACAGAGGAGCAGCGAGCGGTCTTATCTACCTGA 1237
117 rAspThrGluSerAsnAsnGluGluGlnArgSerGlyLeuIleTyrLeu 134
1238 CCAACCATCGCCGCGAGCGCGCAAGCGTGCCTCAAGGAGGAGCAC 1287
134 hrAsnHisIleAlaArgAlaGlnArgValSerLeuLysGluGluHis 150
1288 CCGCGCTACGACTGCTGCTGCGCGCGCTCCGAGAACTCGCAGGACGCGCT 1337
151 ArgAlaTyrAspLeuArgAlaAlaSerGluAsnSerGlnAspAlaLe 167
1338 CCGCGTGTGTCAGCACCGGAGGAGCAGATGAAGGTGTACAGTGCGAAC 1387
167 uArgValValSerThrSerGlyGluGlnMetLysValTyrLysCysGluH 184
1388 ACTGCGCGGTGCTCTCTGTCATCAGTCATGATACACCATCCACATGGGC 1437
184 isCysArgValLeuPheLeuAspHisValMetTyrThrIleHisMetGly 200
1438 TGCCACGGCTCCGTCATCCTTTGAGTGCAACATGTGCGGCTACCACAG 1487
201 CysHisGlyPheArgAspProPheGluCysAsnMetCysGlyTyrHisSe 217
1488 CCAGGACCGGTACGAGTCTGTCGTCACATACGCGAGGAGGAGCACCGCT 1537
217 rGlnAspArgTyrGluPheSerSerHisIleThrArgGlyGluHisArgP 234
1538 TCACATG 1545
234 heHisMet 236
seq_name: /cgn2_6/ptodata/2/iaa/6B_COMB.pep.us-08-711-417c-177

seq_documentation_block:
; Sequence 177, Application US/08711417C
; Patent No. 6228611
; GENERAL INFORMATION:
; APPLICANT: Georgopoulos, Katia A.
; TITLE OF INVENTION: IKAROS: A T CELL PATHWAY REGULATORY GENE
; NUMBER OF SEQUENCES: 202
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 225 Franklin Street
; CITY: Boston
; STATE: MA

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1147 GAGCGGAGGCGTCCCGGAGCAACAGTGCACAGACTCCACGGACACCGA 1196  
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101 GluArgGluAlaSerProSerAsnSerCysGlnAspSerThrAspThrG1 117  
1197 GAGCAACAACAGGAGGAGCGAGCGGCTTTATCTACTCTGACCAACACACA 1246  
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117 uSerAsnAsnGluGlnArgSerGlyLeuIleYrLeuThrAsnHisI 134  
1247 TCGCCCGGACGCGCGCAAGCC...GTGTCGCTCAAGGAGGAGCACCGGCC 1293  
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134 leAlaArgAlaGlnArg\*\*\*ValSerLeuLysGluGluHisArgAla 150  
1294 TACGACCTGCTGCGCGCGCGCTCCGAGAACTCGCAGGAGCGGCTCCCGGT 1343  
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151 TyrAspLeuLeuArgAlaAlaSerGluAsnSerGlnAspAlaLeuArgVa 167  
1344 GGTCAAGCACCGGAGGAGCAGATGAAGGTGTACAAGTGCAGACACTGCC 1393  
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167 lValSerThrSerGlyGluGlnMetLysValTyrLysCysGluHisCysA 184  
1394 GGTGCTCTTCTCGATCATGTACACCATCCACATG..... 1434  
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184 rgValLeuPheLeuAspHisValMetTyrThrIleHisMet\*\*\*\*\* 200  
1435 GGCTGCCACGCTTCCGCTGATCCTTTTTCAGTGCAACATGTGCGGCTACCA 1484  
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201 GlyCysHisGlyPheArgAspPropheGluCysAsnMetCysGlyTyrH1 217  
1485 CAGCCAGGACCGGTACGAGTTCTCGTCGCACATAACGCGAGGGGAGCAC 1534  
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217 sSerGlnAspArgTyrGluPheSerSerHisIleThrArgGlyGluHisA 234  
1535 GCTTCCACATGAGC 1548  
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234 rgPheHisMetSer 238

